

April 1, 1973; on hazardous liquid intrastate pipelines, other than low-stress pipelines, before October 20, 1988; on carbon dioxide pipelines before July 12, 1994; and on low-stress pipelines before July 12, 1996 as to the need for cathodic protection, and cathodic protection shall be provided where necessary.

[Amdt. 195-45, 56 FR 26926, June 12, 1991, as amended by Amdt. 195-53, 59 FR 35471, July 12, 1994]

§ 195.416 External corrosion control.

(a) Each operator shall, at intervals not exceeding 15 months, but at least once each calendar year, conduct tests on each buried, in contact with the ground, or submerged pipeline facility in its pipeline system that is under cathodic protection to determine whether the protection is adequate.

(b) Each operator shall maintain the test leads required for cathodic protection in such a condition that electrical measurements can be obtained to ensure adequate protection.

(c) Each operator shall, at intervals not exceeding 2½ months, but at least six times each calendar year, inspect each of its cathodic protection rectifiers.

(d) Each operator shall, at intervals not exceeding 5 years, electrically inspect the bare pipe in its pipeline system that is not cathodically protected and must study leak records for that pipe to determine if additional protection is needed.

(e) Whenever any buried pipe is exposed for any reason, the operator shall examine the pipe for evidence of external corrosion. If the operator finds that there is active corrosion, that the surface of the pipe is generally pitted, or that corrosion has caused a leak, it shall investigate further to determine the extent of the corrosion.

(f) Any pipe that is found to be generally corroded so that the remaining wall thickness is less than the minimum thickness required by the pipe specification tolerances must either be replaced with coated pipe that meets the requirements of this part or, if the area is small, must be repaired. However, the operator need not replace generally corroded pipe if the operating pressure is reduced to be commensurate with the limits on operating

pressure specified in this subpart, based on the actual remaining wall thickness.

(g) If localized corrosion pitting is found to exist to a degree where leakage might result, the pipe must be replaced or repaired, or the operating pressure must be reduced commensurate with the strength of the pipe based on the actual remaining wall thickness in the pits.

(h) The strength of the pipe, based on actual remaining wall thickness, for paragraphs (f) and (g) of this section may be determined by the procedure in ASME B31G manual for Determining the Remaining Strength of Corroded Pipelines or by the procedure developed by AGA/Battelle—A Modified Criterion for Evaluating the Remaining Strength of Corroded Pipe (with RSTRENG disk). Application of the procedure in the ASME B31G manual or the AGA/Battelle Modified Criterion is applicable to corroded regions (not penetrating the pipe wall) in existing steel pipelines in accordance with limitations set out in the respective procedures.

(i) Each operator shall clean, coat with material suitable for the prevention of atmospheric corrosion, and maintain this protection for, each component in its pipeline system that is exposed to the atmosphere.

(j) For aboveground breakout tanks where corrosion of the tank bottom is controlled by a cathodic protection system, the cathodic protection system must be inspected to ensure it is operated and maintained in accordance with API Recommended Practice 651, unless the operator notes in the procedure manual (§195.402(c)) why compliance with all or certain provisions of API Recommended Practice 651 is not necessary for the safety of a particular breakout tank.

[Amdt. 195-22, 46 FR 38360, July 27, 1981, as amended by Amdt. 195-24, 47 FR 46852, Oct. 21, 1982; Amdt. 195-31, 49 FR 36384, Sept. 17, 1984; Amdt. 195-52, 59 FR 33397, June 28, 1994; Amdt. 195-66, 64 FR 15936, Apr. 2, 1999]

§ 195.418 Internal corrosion control.

(a) No operator may transport any hazardous liquid or carbon dioxide that would corrode the pipe or other components of its pipeline system, unless it

§ 195.420

has investigated the corrosive effect of the hazardous liquid or carbon dioxide on the system and has taken adequate steps to mitigate corrosion.

(b) If corrosion inhibitors are used to mitigate internal corrosion the operator shall use inhibitors in sufficient quantity to protect the entire part of the system that the inhibitors are designed to protect and shall also use coupons or other monitoring equipment to determine their effectiveness.

(c) The operator shall, at intervals not exceeding 7½ months, but at least twice each calendar year, examine coupons or other types of monitoring equipment to determine the effectiveness of the inhibitors or the extent of any corrosion.

(d) Whenever any pipe is removed from the pipeline for any reason, the operator must inspect the internal surface for evidence of corrosion. If the pipe is generally corroded such that the remaining wall thickness is less than the minimum thickness required by the pipe specification tolerances, the operator shall investigate adjacent pipe to determine the extent of the corrosion. The corroded pipe must be replaced with pipe that meets the requirements of this part or, based on the actual remaining wall thickness, the operating pressure must be reduced to be commensurate with the limits on operating pressure specified in this subpart.

[Amdt. 195-22, 46 FR 38360, July 27, 1981, as amended by Amdt. 195-20B, 46 FR 38922, July 30, 1981; Amdt. 195-24, 47 FR 46852, Oct. 21, 1982; Amdt. 195-45, 56 FR 26927, June 12, 1991]

§ 195.420 Valve maintenance.

(a) Each operator shall maintain each valve that is necessary for the safe operation of its pipeline systems in good working order at all times.

(b) Each operator shall, at intervals not exceeding 7½ months, but at least twice each calendar year, inspect each mainline valve to determine that it is functioning properly.

(c) Each operator shall provide protection for each valve from unauthorized operation and from vandalism.

[Amdt. 195-22, 46 FR 38360, July 27, 1981; 47 FR 32721, July 29, 1982, as amended by Amdt. 195-24, 47 FR 46852, Oct. 21, 1982]

49 CFR Ch. I (10-1-99 Edition)

§ 195.422 Pipeline repairs.

(a) Each operator shall, in repairing its pipeline systems, insure that the repairs are made in a safe manner and are made so as to prevent damage to persons or property.

(b) No operator may use any pipe, valve, or fitting, for replacement in repairing pipeline facilities, unless it is designed and constructed as required by this part.

§ 195.424 Pipe movement.

(a) No operator may move any line pipe, unless the pressure in the line section involved is reduced to not more than 50 percent of the maximum operating pressure.

(b) No operator may move any pipeline containing highly volatile liquids where materials in the line section involved are joined by welding unless—

(1) Movement when the pipeline does not contain highly volatile liquids is impractical;

(2) The procedures of the operator under § 195.402 contain precautions to protect the public against the hazard in moving pipelines containing highly volatile liquids, including the use of warnings, where necessary, to evacuate the area close to the pipeline; and

(3) The pressure in that line section is reduced to the lower of the following:

(i) Fifty percent or less of the maximum operating pressure; or

(ii) The lowest practical level that will maintain the highly volatile liquid in a liquid state with continuous flow, but not less than 50 p.s.i. (345 kPa) gage above the vapor pressure of the commodity.

(c) No operator may move any pipeline containing highly volatile liquids where materials in the line section involved are not joined by welding unless—

(1) The operator complies with paragraphs (b) (1) and (2) of this section; and

(2) That line section is isolated to prevent the flow of highly volatile liquid.

[Amdt. 195-22, 46 FR 38360, July 27, 1981; 46 FR 38922, July 30, 1981, as amended by Amdt. 195-63, 63 FR 37506, July 13, 1998]